

Date: Tue, 25 May 93 04:30:12 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #637
To: Info-Hams

Info-Hams Digest Tue, 25 May 93 Volume 93 : Issue 637

Today's Topics:

900 MHz digital phone availability?
ALERT: Big Bear Solar Observatory BEARALERT
ARRL BULLETIN 56 ARLB056
Business Band Licensing
Daily Solar Geophysical Data Broadcast for 24 May
Going about building your first transceiver??
HELP help . Vacuum tube 5763.
Itinerant radio license
Quagi antenna polarization question
Radio Shack 70cm HT?
REAL Mods for the HTX-202 (3 msgs)
Sat Radio's

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 25 May 93 01:48:27 GMT
From: microsoft!wingnut!edmitch@uunet.uu.net
Subject: 900 MHz digital phone availability?
To: info-hams@ucsd.edu

Spread spectrum devices are authorized up to a maximum of 1 watt output in the
902-928 MHz band.

They will probably operate at lower power (say 1/4 watt) to conserve the
batteries. Existing 902

MHz phones use conventional NBFM. Newer phones, said to be coming very soon
(summer?) will begin

I don't think you will hear them at all on your packet backbone network; they might hear you but the use of digital spread spectrum modulation will make the phones able to tolerate interference from you pretty well.

Ed Mitchell, KF7VY
edmitch@microsoft.com

BEARALERT 1993 MAY 24/19:00 UT

WM, HZ & GCE

| Automatic relayed from packet radio via |
N8EMR's Ham BBS, 614-895-2553

ZCZC AG97
QST DE W1AW
ARRL BULLETIN 56 ARLB056

FROM ARRL HEADQUARTERS
NEWINGTON CT MAY 18, 1993
TO ALL RADIO AMATEURS

CABLE SYSTEMS MONITORED

THE FCC HAS ANNOUNCED THE RESULTS OF A RECENT PROJECT TO ENFORCE ITS CABLE TELEVISION LEAKAGE STANDARDS. IN MARCH, 1993, THE COMMISSION'S ENFORCEMENT DIVISION FOCUSED ON CABLE SYSTEMS WHICH COULD POSE A DANGER TO PUBLIC SERVICE RADIO COMMUNICATIONS, SUCH AS AERONAUTICAL.

ACCORDING TO THE COMMISSION, THE MARCH SWEEP INCLUDED MONITORING 321 CABLE TV SYSTEMS, VISITING EIGHT SYSTEMS TO ''DISCUSS OPERATOR MEASUREMENTS,'' AND THE CLOSING DOWN OF ONE SYSTEM FOR VIOLATING THE FCC'S CUMULATIVE LEAKAGE INDEX (CLI) LIMIT. THIS PROJECT WAS IN ADDITION TO THE FCC'S ONGOING MONITORING BY ITS FIELD OFFICES NATIONWIDE.

IN ADDITION, THE FCC SENT LETTERS TO 1,550 CABLE TV OPERATORS, ISSUED 112 COMPLIMENTARY LETTERS TO ''CLEAN'' SYSTEMS, AND ISSUED 73 VIOLATION LETTERS. THE EFFORT WAS DIRECTED AT ALL AREAS OF THE COUNTRY, THE COMMISSION SAID.

THE SYSTEM WHICH WAS CLOSED WAS FOUND TO HAVE A SMALL NUMBER OF SIGNIFICANT LEAKS, ACCORDING TO THE FCC'S JEFFREY YOUNG. MOST SYSTEM VIOLATIONS OF THE CLI ARE DUE TO THE ADDITIVE EFFECT OF A LARGE NUMBER OF SMALL LEAKS, YOUNG SAID.

THE FCC PLANS ANOTHER MONITORING PROJECT LATER THIS YEAR, ON A RANDOM BASIS, TO GAUGE THE EFFECT OF ITS ENFORCEMENT AND EDUCATION EFFORTS, YOUNG SAID.

NNNN

Date: 24 May 93 15:32 CDT
From: usc!sol.ctr.columbia.edu!news.kei.com!news.oc.com!utacfd.uta.edu!trsvax!
trsvax!rpo@network.UCSD.EDU
Subject: Business Band Licensing
To: info-hams@ucsd.edu

I suggest you call NABER. They are the equivalent of repeater coordinators for the business band. However, to summarize:

It is very difficult to qualify to legally use the itinerant frequency. You have to show that your radio operations occur over a 'wide geographical area.' Some examples of qualifying

activities would include state road crews, concert 'roadies', and so on.

Assuming you do qualify, the restrictions are similar to amateur radio restrictions:

You must have a valid license before you transmit.

Unlike amateur, your license lets you operate a system composed of many transceivers operated by non-licensees. As the licensee, you are responsible for proper operation of all transceivers operating under your license authority.

You can let unlicensed persons use the transceiver, but you must take steps to prevent unauthorized transmissions:

You must only use the transceiver for commercial use in your business, and only when other commercial channels are unavailable or impractical.

You must yield the frequency to emergency or priority communications.

You must take reasonable steps to prevent interference.

You must not provide a service normally handled by telephone or telegraph unless the broadcast involves the safety of life or property.

You must give your license call every 15 minutes and at the end of continuous transmissions.

You must keep a written record of any modifications to the transceiver.

(This was the short list. For the complete regulations, you need a copy of FCC Rules, Part 90.)

NABER: 1-800-759-0300

FCC: 717-337-1212

Paul Opitz, N5TPQ

Radio Shack Publications

(Are we the only one's encouraging legal, responsible use of these things?)

Date: 25 May 93 03:05:34 GMT

From: news-mail-gateway@ucsd.edu

Subject: Daily Solar Geophysical Data Broadcast for 24 May

To: info-hams@ucsd.edu

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!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 144, 05/24/93
10.7 FLUX=098.4 90-AVG=122 SSN=038 BKI=0120 0011 BAI=002
BGND-XRAY=B2.4 FLU1=1.3E+06 FLU10=1.4E+04 PKI=0021 1111 PAI=003
BOU-DEV=002,006,014,003,004,002,006,008 DEV-AVG=005 NT SWF=00:000
XRAY-MAX= C1.7 @ 1606UT XRAY-MIN= B2.0 @ 0155UT XRAY-AVG= B4.2
NEUTN-MAX= +000% @ 0000UT NEUTN-MIN= +000% @ 0000UT NEUTN-AVG= +0.0%
PCA-MAX= +0.0DB @ 0000UT PCA-MIN= +0.0DB @ 0000UT PCA-AVG= +0.0DB
BOUTF-MAX=55391NT @ 1330UT BOUTF-MIN=55360NT @ 1920UT BOUTF-AVG=55380NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+084,+000,+000
GOES6-MAX=P:+128NT@ 1501UT GOES6-MIN=N:-067NT@ 0328UT G6-AVG=+106,-015,-044
FLUXFCST=STD:100,100,100;SESC:095,095,095 BAI/PAI-FCST=005,005,005/010,010,010
KFCST=2213 3111 2213 3111 27DAY-AP=005,005 27DAY-KP=2121 2221 2111 2221
WARNINGS=
ALERTS=
!!END-DATA!!

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NOTE: The Effective Sunspot Number for 23 MAY 93 was 67.7.
The Full Kp Indices for 23 MAY 93 are: 1o 1- 1- 1o 1+ 1o 2- 1o

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Date: Tue, 25 May 1993 03:37:18 GMT
From: usc!howland.reston.ans.net!usenet.ins.cwru.edu!neoucom.edu!
wtm@network.UCSD.EDU
Subject: Going about building your first transceiver??
To: info-hams@ucsd.edu

```

In the 1970s, I used to work for a 3-letter government agency in Maryland. We were required to wear picture badges hung from chains around our necks.

To enhance security, the original style badges were made of aluminum and etched with the bearer's picture. By the time I started working there, the badges had been changed over to laminated plastic. The urban legend is that someone working on a transmitter had an unfortunate contact with a transmitter final cage with his badge. Ouch! I was always careful to clip my badge to my pocket when working on any live equipment -- or even take my badge off. Going badgeless was a no-no, but I figured that I'd rather get yelled at than get zapped on the neck.

I wonder if anybody ever though about using a plastic neck chain, or more sensibe, just a plastic pocket clip?

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--
Bill Mayhew          NEOUCOM Computer Services Department

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Rootstown, OH 44272-9995 USA phone: 216-325-2511
wtm@uhura.neoucom.edu amateur radio 146.58: N8WED/AA

Date: 25 May 1993 08:25:08 GMT
From: olivea!rolfo@uunet.uu.net
Subject: HELP help . Vacuum tube 5763.
To: info-hams@ucsd.edu

Hello,
I need informations about 5763 vacuum tube used in driver stage of surplus TX
I need in particular of basic data same (Va, Vg2, Vg1, Vf , S , ecc.).

Thanks, in advance.

Bobba Claudio

Date: 24 May 93 15:33 CDT
From: usc!sol.ctr.columbia.edu!news.kei.com!news.oc.com!utacfd.uta.edu!trsvax!
trsvax!rpo@network.UCSD.EDU
Subject: Itinerant radio license
To: info-hams@ucsd.edu

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NABER: 1-800-759-0300

FCC: 717-337-1212

Paul Opitz, N5TPQ

Radio Shack Publications

(Are we the only one's encouraging legal, responsible use of these things?)

Date: 24 May 93 11:36:45 EDT

From: usc!zaphod.mps.ohio-state.edu!darwin.sura.net!udel!news.intercon.com!psinnntp!arrl.org@network.UCSD.EDU

Subject: Quagi antenna polarization question

To: info-hams@ucsd.edu

In rec.radio.amateur.misc, jdc3538@ulb.rit.edu (J.D. Cronin) writes:

>

>

>On Quagi antenna's, what affect does directed-element
>orientation have on polarization and gain?

>

>For example, a bottom-fed loop gives horizontal polarization,
>and a side-fed loop gives vertical.

>

>But do the directed elements have to "agree" with the loop's
>polarization? Are horizontal elements on a vertically-polarized
>antenna as effective as vertical elements on the same antenna?

Yes, the directors do have to agree. It is possible to have

a circularly polarized Quagi, but this requires two sets of directors and a special feed system. We published an article by Gene Marcus on 145/435 MHz Quagis, though it was concluded that while the 70 cm antenna worked, it was not up to "theoretical performance." Despite having a 12 foot boom, it performed similarly to a smaller commercial antenna, according to the author.

But, it was certainly cost effective. This is the primary advantage of the Quagi antennas developed by Wayne Overbeck, N6NB. (April 77 QST/Feb 1978 QST). One can still go to the hardware store and *expect* to find everything you need to build one except the coax connector. And, not pay a fortune.

(the circularly polarized ones are tougher to build, though).

A Quagi is an antenna with a Quad reflector and driven element, with rod type directors. The Quad type driven element is very easy to feed--no complicated baluns or matching networks. But, Wayne discovered, not surprisingly, that the Quad and rod elements aren't interchangeable, that you have to adjust the spacing differently to get good results (unless you are starting out with a terrible antenna :-)).

On the other hand, if you are looking for the ultimate high gain VHF antenna, I suspect that Yagis are superior. They model extremely well, if you correlate with good range data and fudge the appropriate variables :-). I don't believe anyone has done this with Quads or Quagis yet. My guess is that the Front to Back ratio, a relatively easily measured quantity, might be one of the keys to correlating the results.

Zack Lau KH6CP/1

Internet: zlau@arrl.org	"Working" on 24 GHz SSB/CW gear
	Operating Interests: 10 GHz CW/SSB/FM
US Mail: c/o ARRL Lab	80/40/20 CW
225 Main Street	Station capability: QRP, 1.8 MHz to 10 GHz
Newington CT 06111	modes: CW/SSB/FM/packet
	amtor/baudot
Phone (if you really have to): 203-666-1541	

Date: 24 May 93 08:30 CDT
From: usc!sol.ctr.columbia.edu!news.kei.com!news.oc.com!utacfd.uta.edu!trsvax!
trsvax!rpo@network.UCSD.EDU
Subject: Radio Shack 70cm HT?

To: info-hams@ucsd.edu

> Personally, I hope RS expands their ham radio offerings (anyone from
> Tandy read this list?) How about a redesign of the 10m transceiver to
> 6 meters? How about a 70cm HT? How about a real basic 2m mobile
> with 25 watts?

The HTX-404 is an announced product. 70cm HT with all the features
of the HTX-202. A few units have been shipped, but it won't be
generally available until at least mid-Summer.

Paul Opitz, N5TPQ
Radio Shack Publications

Date: Tue, 25 May 1993 03:32:23 GMT
From: csus.edu!netcom.com!wa2ise@decwrl.dec.com
Subject: REAL Mods for the HTX-202
To: info-hams@ucsd.edu

In article <1993May24.163527.4682@lambda.msfc.nasa.gov>
rich@theophilus.msfc.nasa.gov writes:
>In article 93May20233652@larry.larc.nasa.gov, partos@larry.larc.nasa.gov (Dick
Partos) writes:
>->In article <fred-mckenzie-200593131022@k4dii.ksc.nasa.gov> fred-
mckenzie@ksc.nasa.gov (Fred McKenzie) writes:
>->x
>->> Do the following :
>->> 1) Press the F key (uper left side above PTT)
>->> 2) While holding this key in press the L key (under PTT)
>->> 3) Thats all ! Enjoy your radio in the dark !
>->
>->That's in the instruction manual! Sorry!
>-> Dick KE4AZJ
>
>Just looked at my manual. It doesn't mention it. Sorry again!

On page 15, at the bottom. "Using the light" Hit L again to turn the
light off again.

Also probably in the manual, just haven't found it: pressing the "M" key
(above the PTT key) opens the squelch.

It's still useful to mention tricks that are mentioned in the manual.

Date: 24 May 93 08:16 CDT
From: usc!sol.ctr.columbia.edu!news.kei.com!news.oc.com!utacfd.uta.edu!trsvax!
trsvax!rpo@network.UCSD.EDU
Subject: REAL Mods for the HTX-202
To: info-hams@ucsd.edu

There was a bogus mod out there...and it was published in one of the
'Radio Modification' books as though it was real. Please email the
mod and I will check it out and advise.

Paul Opitz, N5TPQ
Radio Shack Publications

Date: 24 May 93 08:22 CDT
From: usc!sol.ctr.columbia.edu!news.kei.com!news.oc.com!utacfd.uta.edu!trsvax!
trsvax!rpo@network.UCSD.EDU
Subject: REAL Mods for the HTX-202
To: info-hams@ucsd.edu

Well, I've gotta be fair. The first print of the manual did not
mention being able to latch on the light (it was never spec'd to me).
I added it as a running change as soon as I found out -- so perhaps
he has one of the first-run manuals.

(Before anyone asks...this was the only missing feature. The revised
manual coincided with some minor changes to the radio: changing
the default calling frequency is the only one I recall off the top
of my head. There is no benefit to ordering a 'new' manual.)

Paul Opitz
Radio Shack Publications

Date: 25 May 93 20:35:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: Sat Radio's
To: info-hams@ucsd.edu

I know several folks here who own the TS790A.
None of them like the rig for Sat work.

I REALLY LIKE MY YAESU 736R!!!!!!!

73 de Roland 7J1AKI/WF4P
or

asqp-nbf@zama-emh1.army.mil

Date: Tue, 25 May 1993 03:14:30 GMT
From: usc!howland.reston.ans.net!usenet.ins.cwru.edu!neoucom.edu!
wtm@network.UCSD.EDU
To: info-hams@ucsd.edu

References <930520.233617.8Y1.rusnews.w165w@garlic.sbs.com>,
<1993May21.170747.19744@anomaly.sbs.com>,
<1993May21.180956.8889@porthos.cc.bellcore.com>
Subject : Re: Radio Shack 70cm HT?

My coworker and I, both holders of licenses, walked into our local AES outlet. He handed the clerk a the requisite amount of cash; the clerk handed back a Yaesu FT-2400. There was no discussion about amateur licenses.

I've bought many transceivers at hamfest fleamarkets, and I don't think the sellers, presumably amateurs themselves, have ever asked me to provide any evidence I actually hold a license.

I've heard a few guys get bum raps from HF net control operators when they elected to stick with their KA or KB novice-style calls after upgrading. I like my new call, n8wed, and decided not to switch to a 2x2 kg8xx call when I upgraded. For now, I still have to say, "/aa," but won't be too surprised to get a few, "are you sure you belong here?" comments once my new ticket arrives and I don't have to use the suffix any more. On-air policing by our peers usually makes more sense than worrying about who buys transceivers.

Occasionally an unlicensed idiot shows up on one of the local repeaters. The dummies usually don't last long. The funniest dummy was a guy that used the autopatch to call his wife. I guess he didn't stop to think that the controller might keep a log of the numbers.

--
Bill Mayhew NEOUCOM Computer Services Department
Rootstown, OH 44272-9995 USA phone: 216-325-2511
wtm@uhura.neoucom.edu amateur radio 146.58: N8WED/AA

End of Info-Hams Digest V93 #637
